

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
31 December 2003 (31.12.2003)

PCT

(10) International Publication Number
WO 2004/001280 A1

(51) International Patent Classification⁷: F17C 3/00, 1/04

(74) Agent: ABC-PATENT, SIVILING. ROLF CHR. B. LARSEN A.S.; Postboks 6150 Etterstad, N-0602 Oslo (NO).

(21) International Application Number:
PCT/NO2003/000188

(22) International Filing Date: 10 June 2003 (10.06.2003)

(25) Filing Language: Norwegian

(26) Publication Language: English

(30) Priority Data:
20023077 25 June 2002 (25.06.2002) NO

(71) Applicant (for all designated States except US): STATOIL ASA [NO/NO]; N-4035 Stavanger (NO).

(72) Inventors; and

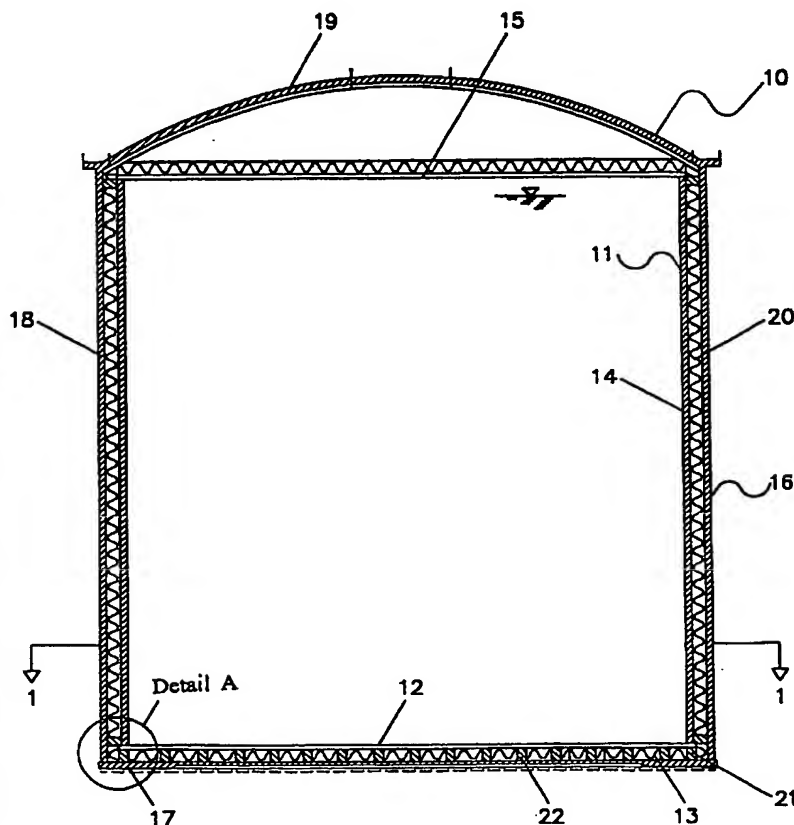
(75) Inventors/Applicants (for US only): SKOVHOLT, Otto [NO/NO]; Hoemsbygda 14d, N-7023 Trondheim (NO). GJØRVEN, Anton [NO/NO]; Norderhaug 6, N-1394 Nesbru (NO).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: TANK FOR STORING CRYOGENIC FLUIDS AND METHOD FOR CONSTRUCTING A FLUID TIGHT TANK



(57) Abstract: The invention relates to a tank (11) for storage of cryogenic fluids. The tank (11) comprises a base section (12), a vertical wall element (14) and preferably an upper top (19). The tank (11) is provided with a fluid tight barrier (26) intended to prevent the stored fluids to escape to the surroundings. The fluid tight barrier (26) is formed of thin metal plates joined together. At least the vertical wall (14) comprises an inner structurally supporting wall element (24) and an outer structurally supporting wall element (25). The fluid tight barrier (26) is arranged between the inner (24) and the outer (25) structurally supporting wall element. The invention relates also to a method for constructing such tank (11), where the base part (12) is firstly erected whereupon a vertical wall (14) is concreted, preferably by means of slipforming or jumpforming. Firstly, the inner structurally supporting wall element (24) of the wall (14) is reinforced and concreted, whereupon a fluid tight barrier (26) is arranged on the external side of the inner structurally supporting wall element (24), whereupon the outer structurally supporting wall element (25) is reinforced and concreted.